

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Actions to Accelerate Adoption and	)	GN Docket No. 16-46
Accessibility of Broadband-Enabled Health	)	
Care Solutions and Advanced Technologies	)	
	)	

**COMMENTS OF COMCAST CORPORATION**

Comcast Corporation (“Comcast”) hereby comments on the Public Notice (“Notice”) released by the Federal Communications Commission (“Commission”) in the above-referenced docket.<sup>1</sup>

**I. INTRODUCTION**

Broadband has an unparalleled ability to transform people’s lives for the better. Broadband Internet access has the power to create greater access to education, employment opportunities, news, information, and entertainment. This transformative power heralds tremendous promise for the future of broadband-enabled healthcare solutions.

Broadband is already beginning to revolutionize healthcare solutions to the benefit of health services providers and patients alike. Among other things, hospitals and other healthcare providers use robust broadband networks to expand care outside their walls. Clinicians around the country leverage the power of broadband to arm themselves with relevant information to deliver better care. High-capacity broadband connections between doctors’ offices, hospitals, and other healthcare facilities enable the collection and analysis of healthcare data, as well as the

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<sup>1</sup> *FCC Seeks Comment and Data on Actions to Accelerate Adoption and Accessibility of Broadband-Enabled Health Care Solutions and Advanced Technologies*, Public Notice, FCC 17-46 (Apr. 24, 2017) (“Notice”).

efficient delivery of actionable information to care teams. Broadband connectivity at home empowers consumers to take more control over their healthcare with better information, heightened access to providers, enhanced monitoring of personal health data, and broader resources for well-being. All of these efforts have the effect of lowering costs and improving patient outcomes.

Comcast supports the Commission's efforts to ensure that our national policy is designed to encourage even more innovation in this space, as well as to facilitate the widespread availability of broadband-enabled healthcare technologies, applications, and services, and all the benefits that flow from these innovations. As described in more detail below, Comcast is at the forefront of facilitating the delivery of next-generation healthcare solutions. In particular, Comcast is a leader in connecting healthcare providers with reliable, secure, high-bandwidth broadband Internet access and transport services, tailored to meet data-intensive demands across wide-area provider networks. And through Comcast Connected Health, Comcast is leveraging its strengths in media and technology to develop platforms by which healthcare providers can take advantage of patient-facing tools that enable consumer access to healthcare resources at home and on-the-go.

Our residential broadband offerings continue to provide consumers throughout our footprint with reliable, world-class broadband Internet services, enabling our customers to take advantage of all the Internet has to offer in the healthcare space. And Comcast has been strongly focused on connecting low-income Americans to broadband – more focused than any other company in America. Comcast's *Internet Essentials* program is the nation's largest and most comprehensive broadband adoption program. Since 2011, *Internet Essentials* has connected 750,000 low-income households, or 3 million Americans, to the power of the Internet in their

homes. This access opens doors to opportunities in education, employment, news, and entertainment, and enables more people to benefit from broadband-enabled healthcare solutions; in fact, 53 percent of *Internet Essentials* subscribers report that they use the service for health or medical information, and a recent survey showed that almost 60 percent of *Internet Essentials* customers were influenced to enroll in the program because it enabled access to health and medical information.

In the Notice, the Commission recognizes the significant potential that broadband-powered technologies have for improving healthcare outcomes, and raises a number of important issues regarding the barriers that persist to the widespread adoption of such technologies. Foremost, the Commission should continue its efforts, highlighted by the Chairman's Digital Empowerment Agenda, to ensure that all Americans have access to high-speed broadband services. In addition, our experience suggests that there are impediments that may lie outside the Commission's purview – including state licensing, Medicaid reimbursement, and medical device regulation – for which regulatory clarity could be helpful to innovators in this space. The Commission's continued focus on these issues will help ensure that all providers and patients can benefit from the innovations and improved solutions made possible by broadband.

## **II. COMCAST IS ENABLING THE ADOPTION OF BROADBAND-ENABLED HEALTHCARE TECHNOLOGIES BY PROVIDERS AND CONSUMERS ALIKE.**

Comcast is an industry leader in developing and deploying a world-class broadband network, and offering services that facilitate the widespread availability of broadband-enabled healthcare technologies, applications, and services and all the benefits that flow from these innovations.

**A. Comcast Offers Innovative Solutions That Help Healthcare Providers and Patients Take Advantage of Broadband-Enabled Healthcare Technologies and Services.**

Comcast's reliable, scalable, and secure broadband service offerings serve as the underpinnings for deployments of healthcare applications and increased connectivity among providers and with patients.<sup>2</sup> Comcast provides Metro Ethernet services to medical institutions across the country, including institutions that are part of the Commission's Rural Health Care program.

One example of the solutions that allow healthcare providers to leverage Comcast's robust broadband network and technical expertise to connect with their patients in innovative and positive ways is Comcast's work with Cooper University Health Care ("Cooper") in Camden, New Jersey.<sup>3</sup> Cooper has more than 5,700 employees, a network of more than 100 outpatient offices throughout southern New Jersey, and averages 26,400 hospital admissions, 76,700 emergency room visits, and nearly 500,000 outpatient visits per year. But its legacy network limited its ability to employ state-of-the-art systems, applications, and services.<sup>4</sup> Comcast installed a series of broadband solutions at Cooper's various sites to deliver reliable, scalable bandwidth. Today, Cooper's hospital staff can exchange data and images quickly and reliably, physicians can instantly access patient information from any of the Cooper facilities, and the enhanced connectivity has enabled Cooper to implement provider-to-patient applications like

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<sup>2</sup> See Comcast Business, *Healthcare*, <https://business.comcast.com/enterprise/industry-solutions/healthcare>.

<sup>3</sup> See Comcast Business, *New Jersey Healthcare Provider Connects More Than 50 Locations, Supports Transition to Electronic Medical Records and Adoption of Telemedicine with High-Performance Wide Area Network*, [https://cdn.wcdc.business.comcast.com/~media/business\\_comcast\\_com/PDFs/Case%20Studies/case\\_study\\_cooper\\_health.pdf?rev=23879cc6-9c17-4b01-8c40-b2be40065c6b](https://cdn.wcdc.business.comcast.com/~media/business_comcast_com/PDFs/Case%20Studies/case_study_cooper_health.pdf?rev=23879cc6-9c17-4b01-8c40-b2be40065c6b).

<sup>4</sup> *Id.*

myCooper, which allows patients to access test results, request prescription renewals, schedule appointments, and communicate with doctors.<sup>5</sup>

Comcast also is exploring strategic partnerships to improve the effectiveness and efficiency of patient communications and education. Comcast is using connectivity, technology, and media to improve the patient experience – in the hospital, in the home, or on-the-go – through Comcast Connected Health. Comcast Connected Health can provide transformative solutions for the healthcare industry, such as through video messaging, home device monitoring, and patient data analytics capabilities.<sup>6</sup> For example, Comcast Connected Health:

- Provides innovative ways for providers and patients to communicate, including through patient-clinician video messaging and a screen-share capability that allows doctors and patients to share documents and other information;
- Will smooth the transition of care from provider facilities to patients' homes by enabling in-home connected device networks that can monitor the patient's activities (such as reminding the patient to adhere to his medication schedule) and collect data useful for ongoing treatment; and
- Includes high-quality educational content, such as videos, surveys, and articles, to provide patients and partners with a more comprehensive care solution.

Comcast Connected Health already has initiated several partnerships with a number of providers. Examples of this work include:

- *Kaiser Permanente*. Over the past 18 months, Comcast has partnered with Kaiser Permanente Northwest ("Kaiser") to help launch Kaiser's "My Pregnancy" app.<sup>7</sup> The app provides information from Kaiser's medical professionals to guide patients and their families through the various milestones of pregnancy, and is available on television, the web, and the mobile web, allowing providers to "engage patients in the place they're

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<sup>5</sup> Press Release, Comcast Corp., *Cooper University Health Care Advances Patient Services With Comcast Business* (Jan. 7, 2015), <http://corporate.comcast.com/news-information/news-feed/cooper-university-health-care-advances-patient-services-with-comcast-business>.

<sup>6</sup> Importantly, the platform keeps information private through secure, HIPAA-compliant cloud data storage.

<sup>7</sup> Beth Walsh, HIMSS16: Cable companies are a 'huge resource' for healthcare, *Clinical Innovation+Technology* (Mar. 2, 2016), <http://www.clinical-innovation.com/topics/interoperability/himss16-cable-companies-are-huge-untapped-resource-healthcare>.

most likely to be open and engaged—the comfort of their own home.”<sup>8</sup> The app features 148 videos, along with interactive elements that allow mothers-to-be and their caregivers to complete surveys and set preferences for their own pregnancy timelines.<sup>9</sup> Initial trials were highly successful, with the rates for sign up and usage of the app much higher than expected.<sup>10</sup>

- *AmeriHealth Caritas*. Comcast is partnering with AmeriHealth Caritas to provide online tools and content to patients in an effort to empower Medicaid recipients with more robust health resources. The partnership will begin a pilot starting in June 2017 for AmeriHealth Caritas in Pennsylvania, and will include patient-facing Care Content, Video Messaging and Care Community Support. Additional launches in other areas are planned in the near future.

Comcast is also one of the founding members of The Health Care Innovation Collaborative in Philadelphia.<sup>11</sup> Comcast’s main role in this effort is to leverage its resources as a communications and technology company to explore ways it can use the power of broadband to get participating organizations, and those they serve, the information and services they need, quickly and efficiently. As part of this project, Comcast has collaborated with Independence Blue Cross on a proof-of-concept demonstration of what an integrated telemedicine model might look like.<sup>12</sup>

Comcast’s initiatives in this space are helping healthcare providers unlock the promise of broadband-enabled healthcare technologies. We look forward to continuing to work with our partners to see this promise fulfilled and ensure that innovation continues to give healthcare providers the tools they need to deliver the best service possible to their patients.

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<sup>8</sup> *Id.*

<sup>9</sup> See Kaiser Permanente | My Pregnancy, <https://www.my-pregnancy.org/>.

<sup>10</sup> Walsh, *supra* n. 7.

<sup>11</sup> See Greater than Greater Philadelphia, A Healthcare Innovation Collaborative, <http://www.greaterthanhealthcare.com/about/>.

<sup>12</sup> See A Region of Firsts: Greater Philadelphia Leverages Its Historic Position as a Global Leader in Life Sciences, <http://www.greaterthanhealthcare.com/a-region-of-firsts-greater-philadelphia-leverages-its-historic-position-as-a-global-leader-in-life-sciences/>.

**B. Comcast's Leading *Internet Essentials* Program Highlights the Potential Benefits of Broadband-Delivered Healthcare Solutions for All Americans.**

Beyond the reliable, world-class residential broadband Internet services we offer providers and patients throughout our footprint that enable our customers to take advantage of all the Internet has to offer in the healthcare space, Comcast also has been strongly focused on connecting low-income Americans to broadband. Since 2011, when we launched *Internet Essentials*, the program has grown into the nation's largest and most comprehensive broadband adoption program. Through August 2016, we have connected 3 million low-income Americans (or 750,000 families) to the power of the Internet at home. This record is multiple orders of magnitude greater than all other private sector low-income broadband adoption programs combined.

Since launching *Internet Essentials*, Comcast has made more than 25 key enhancements to the program. With these enhancements, we have consistently improved the quality of the program's Internet service, improved the application process, engaged communities on the relevance and value of the Internet, and expanded *Internet Essentials* to reach additional communities. Last year, we redefined the *Internet Essentials* program by expanding program eligibility beyond students and their families to all HUD-assisted households living in our service area.

*Internet Essentials* offers the opportunity to access low-cost high-speed Internet service for \$9.95 a month, the option to purchase an Internet-ready computer for less than \$150, and multiple options to access free digital literacy training in print, online, and in person. The success of *Internet Essentials* is due both to its design as an integrated wrap-around solution, and to its structure as a partnership between Comcast and thousands of school districts, libraries, elected officials, and nonprofit community partners.

Our experience confirms the tremendous benefits in healthcare that accrue to those who have access to the Internet. In particular, 53 percent of *Internet Essentials* subscribers report that they use the service for health or medical information, and 41 percent use the service for health insurance matters.<sup>13</sup> And more recent survey results reflect the fact that an increasing proportion of consumers in the program are starting to appreciate the potential benefits to their healthcare from broadband – nearly 60 percent of *Internet Essentials* customers said that the ability to access health and medical information influenced their decision to enroll. These data reinforce the importance of encouraging innovation and empowering healthcare providers and consumers to take advantage of broadband-enabled healthcare solutions.

### **III. REMOVING BARRIERS AND ACCELERATING ADOPTION OF NEXT-GENERATION BROADBAND-ENABLED HEALTHCARE SOLUTIONS.**

The success that we have seen so far confirms that the Commission is right to be optimistic about the power of broadband to deliver improved healthcare outcomes to patients. Based on our experience, there are a number of steps the Commission could take – or could encourage other regulators and government leaders to take – to help foster increased innovation and improved healthcare for patients.

First and foremost, the Commission must continue its efforts to ensure that consumers have access to broadband. To that end, we commend the Chairman’s Digital Empowerment Agenda and his focus on ensuring that all Americans have access to broadband. And Commissioner Clyburn’s leadership on the Connect2Health Task Force and her focus on ensuring that all Americans benefit from the innovations made possible by broadband-enabled healthcare solutions has been critical.

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<sup>13</sup> Comcast Corporation, Connection is Essential: A 5 Year Progress Report, at 14-15 (Aug. 2016), <http://corporate.comcast.com/images/Internet-Essentials-Year-5.pdf>.

Furthermore, as the Notice recognizes, there are issues not directly within the Commission's purview that affect the ability of healthcare providers and patients to take advantage of these improved services.<sup>14</sup> Nevertheless, it is important for the Commission to have a full understanding of the range of issues implicated by the growth of broadband-enabled healthcare services. In particular:

- *State licensure rules restrict telehealth across state lines.* Currently, telehealth is restricted by rules that limit doctor-patient communications to within state lines.<sup>15</sup> Only nine state medical or osteopathic boards issue licenses allowing an out-of-state provider to render telehealth service in their state.<sup>16</sup> And while 18 states have adopted the Federation of State Medical Board's Interstate Medical Licensure Compact, there is still uncertainty around how the compact will function.<sup>17</sup> The dearth of cross-state licensing programs remains an impediment to the deployment of telehealth and e-care initiatives.
- *Medicaid and Medicare reimbursement issues.* Likewise, uncertainty about the qualifications of telehealth for Medicaid and Medicare reimbursements is hindering the deployment of telehealth systems. And, as with cross-state licensing, this is not a new issue.<sup>18</sup> Currently, 48 states and the District of Columbia provide reimbursement for some form of live video in Medicaid fee-for-service.<sup>19</sup> But only 13 state Medicaid programs reimburse for store-and-forward services, and only 22 state Medicaid programs provide reimbursement for remote patient monitoring. Only nine state programs

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<sup>14</sup> See Notice at 12, 23.

<sup>15</sup> The Commission identified this issue in its 2010 National Broadband Plan, advising that governors and state legislatures should work together and with other stakeholders to craft an interstate licensing agreement for e-care. FCC, Connecting America: The National Broadband Plan, at 206 (2010), <https://transition.fcc.gov/national-broadband-plan/national-broadband-plan.pdf> ("National Broadband Plan").

<sup>16</sup> Center for Connected Health Policy, State Telehealth Laws and Reimbursement Policies: A Comprehensive Scan of the 50 States and District of Columbia, at 9 (Apr. 2017), <http://www.cchpca.org/sites/default/files/resources/50%20STATE%20PDF%20FILE%20APRIL%202017%20FINAL%20PASSWORD%20PROTECT.pdf> ("CCHP State Telehealth Laws").

<sup>17</sup> *Id.*

<sup>18</sup> The National Broadband Plan recommended that "Congress and the Secretary of Health and Human Services (HHS) should consider developing a strategy that documents the proven value of e-care technologies, proposes reimbursement reforms that incent their meaningful use and charts a path for their widespread adoption." National Broadband Plan at 204.

<sup>19</sup> CCHP State Telehealth Laws at 6.

reimburse for all three telehealth services.<sup>20</sup> A piecemeal approach to this national problem continues to inhibit investment and innovation.

- *HIPAA Applicability to Broadband-enabled Solutions.* The risk of HIPAA liability also has had a chilling effect on telehealth deployments. The Department of Health and Human Services Office for Civil Rights has explained that the “conduit” exception is intended to exclude Internet service providers from HIPAA coverage.<sup>21</sup> But it is unclear how this exception works for platforms or other service providers that offer a value-added connection with information processing, innovative applications, and enhancements.
- *FDA Treatment of “Medical Devices.”* Deployment of telehealth apps has been hindered by uncertainty around the need for prior regulatory approvals. This also is not a new concern.<sup>22</sup> The ongoing regulatory uncertainty regarding potential medical device approval continues to inhibit the development of common-sense healthcare solutions for consumers.

While the Commission may not have authority to address these issues directly, it can serve an important role as a champion among its fellow regulators, agencies, legislators, and government leaders for policies designed to encourage the continued development and deployment of these innovations.

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<sup>20</sup> *Id.* at 3.

<sup>21</sup> See *Modifications to the HIPAA Privacy, Security, Enforcement, and Breach Notification Rules Under the Health Information Technology for Economic and Clinical Health Act and the Genetic Information Nondiscrimination Act; Other Modifications to the HIPAA Rules*, 78 Fed. Reg. 5566, 5571-72 (2013).

<sup>22</sup> The National Broadband Plan warned that “[p]otential lack of clarity about the appropriate regulatory approach to these convergent technologies threatens to stifle innovation, slow application approval processes and deter adoption,” and recommended that the Commission should work with the Food and Drug Administration (FDA) to “clarify regulatory requirements and the approval process for converged communications and health care devices.” National Broadband Plan at 206-07.

## V. CONCLUSION

Comcast looks forward to continuing to facilitate next-generation broadband-enabled health capabilities for providers and patients through its offerings, and to working with the Commission to help realize the goals of better healthcare outcomes for consumers through innovation in broadband-enabled technologies and services.

Respectfully submitted,

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